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Panic!: Anxiety sensitivity, perceived stress, and social support as predictors of uncued panic attacks in college students

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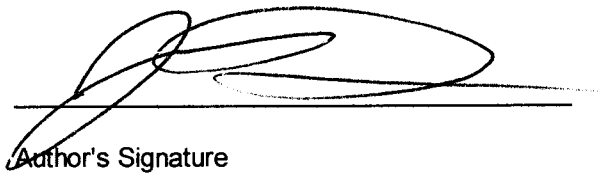

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PANIC!: Anxiety sensitivity, perceived stress, and social support as predictors of uncued panic attacks in college students

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BY

Julie Lynn Kaspar

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Running Head: PANIC!

PANIC!: Anxiety sensitivity, stress, and social support as predictors of uncued panic attacks in college students

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Abstract

Uncued panic attacks are prevalent in the college student population. In the current study, anxiety sensitivity, perceived stress, and social support were explored as predictors of uncued panic frequency. Additionally, family support and close friend support were compared. A sample of 117 college students from Eastern Illinois University were assessed using an online survey that included a one-item uncued panic frequency measure, the Anxiety Sensitivity Index (ASI), the Perceived Stress Scale (PSS), and the Child and Adolescent Social Support Scale-College Version (College CASSS). Results indicated that all three predictors were significant when tested independently. When placed in a hierarchical regression, anxiety sensitivity was significant, perceived stress added a significant contribution, but social support did not add significant predictive value. Close friend support was found to be more predictive of uncued panic than family support, which was not found to be significant. Implications for psychotherapy suggest that clinicians can implement interventions that decrease anxiety sensitivity and perceived stress, while increasing social support especially focusing on close friend support.

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Introduction

The purpose of this study is to examine the predictive value of anxiety sensitivity, perceived stress, and social support in relation to uncued panic attacks. This study will examine each of the factor's predictive value independently, and then as a hierarchical model. Previous research has found a strong relationship between anxiety sensitivity and panic frequency (Beck & Scott, 1987; Brown & Cash, 1990; Donnell & McNally, 1990; Hayward, Killen, Kraemer, & Taylor, 2000), but perceived stress and social support have not been studied as much. Research on stress shows a connection to panic (Macaulay & Kleinknecht, 1989; Norton, Cox, & Malan, 1992; Norton, Zvolensky, Bonn-Miller, Cox, & Norton, 2008), while research on social support has been lacking (Macaulay & Kleinknecht, 1989; Viana & Rabian, 2008). The current study attempted to both confirm the relationship between panic and anxiety sensitivity while also clarifying the unique predictiveness of perceived stress and social support.

According to Isaac Marks' book, *Fears, Phobias and Rituals*, the word panic is derived from the Greek god of herds and pastures, Pan, whose shape was that of a goat. He roamed the fields at night and loved to scare people. The emotion he evoked in people was called panic. Later the Greek god fell out of favor because of his resemblance to the horned image of the devil in the Christian faith (Marks, 1987). Now we view panic through the lens of science: physical reactions (sweating, heavy breathing), biological reactions (increased activity in the sympathetic nervous system), and emotional reactions (fear of fear, fear of being crazy, fear of looking foolish). In other words, we are discussing panic attacks. A panic attack is a "distinct episode of acute fear" (Swede & Jaffe, 1987, p. 5).

The presence of unexpected, or uncued, panic attacks is required for a diagnosis of Panic Disorder (DSM-IV-TR, 2000), but these attacks can occur outside of the disorder (Telch, Lucas, & Nelson, 1989). In fact it is quite common to experience panic attacks, especially for the college population (Den Boer, 1997; Kennicott, Kottman, & Ashby, 1998). In order to qualify for a diagnosis of Panic Disorder, a person must experience reoccurring unexpected panic attacks (at least four) and either worry of future attacks, worry of what the attacks mean, or change in behavior due to the attacks (DSM-IV-TR, 2000).

Although there are cued and uncued panic attacks, the focus of the present study was on uncued panic attacks. According to the DSM-IV-TR (2000), cued panic attacks are fundamentally different than uncued panic attacks. Cued, or situationally bound, panic attacks are the direct result of exposure to or anticipation of a feared stimulus. This type of panic attack is most common in individuals with specific phobias. Uncued, or unexpected, panic attacks are not associated with an internal or external stimulus. This type of panic attack is required for a diagnosis of Panic Disorder, but they are not bound to only that disorder. Many people experience uncued panic attacks that do not qualify for Panic Disorder (DSM-IV-TR, 2000). People may also state that they are experiencing uncued panic attacks if they are unable to attach their panic attack to any outside stimulus. According to Barlow's model of panic, this phenomenon is most prevalent during the initial panic attack or, as he names them, false alarms. He states these panic attacks occur "during or following a period of stress in people who have a biological vulnerability to experience panic attacks in response to stress" (Antony & Swinson, 2000, p. 28). This biological vulnerability could mean anxiety sensitivity. In this explanation,

two of the factors (perceived stress and anxiety sensitivity) are being linked to uncued panic attacks.

This study is also looking at nonclinical panickers, meaning that they do not qualify for a diagnosis of Panic Disorder. In most studies nonclinical panickers and infrequent panickers are interchangeable terms. When the term infrequent panicker is used, it will mean nonclinical panicker unless otherwise specified.

It is important to have a clear definition of what constitutes a panic attack. According to the 4th edition of the Diagnostic and Statistical Manual-text revision (DSM-IV-TR, 2000), a panic attack is defined as follows:

> A discrete period of intense fear or discomfort, in which four (or more) of the following symptoms developed abruptly and reached a peak within 10 minutes:
>
> (1) palpitations, pounding heart, or accelerated heart rate
>
> (2) sweating
>
> (3) trembling or shaking
>
> (4) sensations of shortness of breath or smothering
>
> (5) feeling of choking
>
> (6) chest pain or discomfort
>
> (7) nausea or abdominal distress
>
> (8) feeling dizzy, unsteady, lightheaded, or faint
>
> (9) derealization (feelings of unreality) or depersonalization (being detached from oneself
>
> (10) fear of losing control or going crazy

(11) fear of dying

(12) paresthesias (numbness or tingling sensation)

(13) chills or hot flushes (p. 432)

Deacon and Valentier (2001) found that out of a sample of 1071 undergraduates, 7.4% had reported one or more unexpected panic attacks in the previous year. Another study found that out of 2,375 students in introductory psychology at the University of Texas, 292 (12.29%) reported having at least one panic attack in their lifetime (Telch et. al., 1989). A third study of 311 female undergraduate students attending the University of West Virginia reported 125 participants experienced infrequent panic; and of those 125 (46.4%) experienced uncued panic attacks (Whittal, Suchday, & Goetsch, 1994). A fourth study with 317 introductory psychology students at three universities (University of Albany, State University of New York, and the University of California in Los Angeles) found a lifetime uncued panic attack prevalence of 14% and a 10% occurrence in the past three months (Craske, Brown, Meadows, & Barlow, 1995). It is clear that infrequent panic attacks in the college population are prevalent. Given the rates of occurrence in this population, it is important to discuss the consequences of having panic attacks.

According to Whittal et al. (1994), "infrequent panickers reported higher levels of depression..." (p. 238). Tull, Gratz, and Lacroce (2006) looked at 6 studies and found a link between non-clinical panic attacks and depressive symptoms. Another consequence of experiencing uncued panic attacks was found in a study by Craske et al. (1995). They found that 6% of the students that experienced cued or uncued panic attacks in the last 3 months reported using alcohol or drugs to attempt to reduce panic.

Additionally, infrequent and frequent (those who qualify for Panic Disorder) panickers have similar symptoms, but the infrequent panickers' symptoms are less severe and less frequent (Telch et. al., 1989; Whittal et. al., 1994). Whittal et al. suggested that "frequency and severity of panic attacks may be on a continuum" (p. 238). In fact, Ehlers (1995) found that infrequent panickers are more likely to develop Panic Disorder than the general population (Tull et. al., 2006). However, Barlow (1988) stated that most people who experience panic attacks do not develop Panic Disorder because they lack the anxiety of future attacks. This study, as stated before, will look at nonclinical (infrequent) college panickers who report experiencing uncued panic attacks.

In Swede and Jaffe's book, *The Panic Attack Recovery Book*, the relationship between uncued panic attacks and stress is explained in three components. First, the person experiences a great amount of stress over a period of time before experiencing panic attacks. Additionally, the person is not taking care of themselves (physically and mentally); the person's output of energy is greater than their input of energy (good food, exercise, relaxation, sleep, etc.). Lastly, the person puts too much focus on their symptoms of stress (1987).

Swede and Jaffe's explanation is consistent with the current study's rationale and the life of a typical college student. The student is experiencing a large amount of stress from life changes, challenging classes, interpersonal relationships, etc. The typical college student does not eat well or exercise on a regular basis, meaning that the typical student is "run-down." Another source of input would be a strong social support. If a college student does not have support from friends or family, then it can be difficult for them to balance how much they are outputting. The two above sentences describe most

college students. However, to have a college student who experiences uncued panic attacks, one must have sensitivity to the symptoms that are associated with panic attacks (anxiety). In other words, the student is predisposed to anxiety. Following this rationale, areas that will be explored in relation to uncued panic attacks are as follows: anxiety sensitivity, perceived stress, and social support.

Anxiety Sensitivity

Anxiety sensitivity is defined as the "fear of anxiety symptoms that are based on beliefs that these symptoms have harmful consequences" (Reiss, Peterson, Gursky, & McNally, 1990, p. 83). Individuals who are more sensitive to anxiety usually respond with more fear to a benign symptom (such as a tightening chest) than persons who are less sensitive to anxiety. Anxiety sensitivity has been shown in many studies to be linked to panic attacks across several different factors (Asmundson & Norton, 1993; Beck & Scott, 1987; Brown & Cash, 1990; Cox, Endler, & Norton, 1994; Cox, Endler, Norton, & Swinson, 1991; Donnell & McNally, 1990; Hayward, Killen, Kraemer, & Taylor, 2000; Lau, Calamari, & Waraczynski, 1996; Schmidt, Lerew, & Jackson, 1999; Stewart, Knize, & Pihl, 1992; Tull et al., 2006).

In a study by Donnell and McNally (1990), 425 college students were asked to complete The Anxiety Sensitivity Index (ASI) and the Panic Attacks Questionnaire (PAQ). The researchers were only looking at those students who had experienced uncued panic attacks; therefore, they revised the PAQ to eliminate those experiencing cued panic attacks. Donnell and McNally distinguished students into three different anxiety sensitivity groups (high, medium, and low) based on the student's ASI score. High sensitivity was evidenced by scoring one standard deviation above the normative mean,

medium was scoring within one standard deviation above or below the mean, and low was scoring one standard deviation below the mean. They found that out of the students who experienced uncued panic attacks (15.5% of the total subjects), 5.7% (22 students) experienced high anxiety sensitivity, 10.5% (41 students) experienced medium anxiety sensitivity, and 0.1% (3 students) experienced low anxiety sensitivity. Donnell and McNally concluded that students who experienced low anxiety sensitivity rarely reported uncued panic attacks (1990).

In Cox et al.'s study (1991), 265 college students were given a series of self-report measures to complete. The ASI and the PAQ were among the tests completed. The subjects were placed into a high, medium, or low anxiety sensitivity group using the same scale as in Donnell and McNally's study described above. They found that 40 students (30%), in the high anxiety sensitivity group reported spontaneous panic (uncued panic attacks). Approximately 15%, (n=33) of the students in the medium anxiety sensitivity group reported spontaneous panic; and only 2 of the students in the low anxiety sensitivity group reported spontaneous panic. These findings are similar to Donnell and McNally's 1990 study. Cox et al. also found that subjects with high anxiety sensitivity were more likely than those who reported lower anxiety sensitivity to anticipate future uncued panic attacks. "These results indicate that anxiety sensitivity is frequently associated with panic attacks in nonclinical subjects" (Cox et al., 1991, p. 368).

In a study by Asmundson and Norton (1993), 463 psychology students were asked to complete the ASI and the Anxiety Questionnaire (AQ). The AQ was created by Telch (1989). The AQ is a 15-item measure created to assist in making a PD diagnosis according to the DSM-III and DSM-III-R criteria. The first question asks if the subject

has experienced an uncued panic attack and explains the criteria of an uncued panic attack. If the subject answers yes to this question, he/she is asked to answer eight additional yes/no questions assessing specifics of the uncued panic attacks. Once these questions are completed, the subject then answers six additional items regarding the number of attacks and nature of their panic avoidance (Telch et al., 1989). As in the two previous studies discussed, the subjects in this study were placed into high, medium, and low anxiety sensitivity groups using the same criteria as Donnell and McNally (1990). Asmundson and Norton found that 23%, or 20 students, who were placed in the high anxiety sensitivity group reported spontaneous panic (uncued panic attacks). Nine percent, or 29 students, who were placed in the medium group reported spontaneous panic; and 8%, or 4 students, who were placed in the low group reported spontaneous panic. The results in this study are consistent with the two studies discussed previously. These studies show that individuals who experience high sensitivity to anxiety are more likely to experience uncued panic attacks (spontaneous panic).

Looking at anxiety sensitivity in the college population is highly relevant to this study and is part of the Swede and Jaffe uncued panic explanation. They state that a predisposition to anxiety sensitivity is essential to experience uncued panic attacks. As the above studies have evidenced, there is a strong positive correlation between anxiety sensitivity and uncued panic attacks. Knowing that other studies have found a strong correlation between the two, it is important to explore this relationship in this study. This study is also looking at relationships that are not studied as extensively. The strong relationship between anxiety sensitivity and uncued panic attacks may shed light on the

possible relationship(s) between uncued panic attacks and each of the other variables (perceived stress and social support).

Perceived Stress

Stress in the student population is not new or surprising. According to a study by Norton, Cox, and Malan (1992), subjects who reported non-clinical levels of panic state that their panic attacks "occur in primarily stressful (e.g. taking an exam) and social situations (e.g. talking to a group)" (p. 128). Both of the situations listed above are common experiences for students. Macaulay and Kleinknecht (1989) found that stress and panic were positively correlated in a sample of 660 high school and college students (age 13 to 18)). Norton, Zvolensky, Bonn-Miller, Cox, and Norton (2008) found that panickers reported "when under a lot of stress" most frequently in relation to their panic attacks. The second most reported situation was "out of the blue." It is clear that stress and panic attacks are closely related. What is not obvious is if uncued panic attacks are as closely related with stress.

According to an article by Jacofsky, Santos, Khemlani-Patel and Neziroglu of the Bio Behavioral Institute (2010), "uncued panic attacks are in response to some kind of life stress, but this stress is often outside the immediate awareness of the person experiencing it" (para. 5). Barlow has made a model of panic that involves stress. He postulates that some people are "vulnerable to experiencing panic from time to time (in response to stress)," but that they are not necessarily apprehensive about future panic attacks. Therefore, they do not develop Panic Disorder (Antony & Swinson, 2000, p. 29).

Sandler, Wilson, Asmundson, Larsen, and Ediger (1992) conducted a study with 48 undergraduate introductory psychology students. Half of the students reported

experiencing a panic attack and were categorized as nonclinical panickers, who reported uncued panic attacks. The other half was selected randomly as a control group (non-panickers). Sandler et al. were measuring cardiovascular response to both psychological stress and physical exercise. They found no differences regarding cardiovascular response to stress between the nonclinical panickers, who experience uncued panic attacks, and the non-panickers (Sandler et al., 1992) The stress they were looking at was "in the moment" stress, and not necessarily long-term stress.

In Messenger and Shean's study (1998), 57 students were willing to participate and met criteria for one of three groups: (1) panic group, (2) high ASI group with no panic history, and (3) low ASI group with no panic history. Those with a history of panic were screened for uncued panic attacks. Only those with uncued panic attacks were asked to participate in the study. The subjects were asked to participate in both a physical stress exercise (balloon inflation) and a mental stress exercise (arithmetic test). After the tests, students were asked to rate their anxiety and distress level. Messenger and Shean found no significant differences between groups. This could be because this study was looking at "in the moment" stress as was the above study.

In a study by Brown and Cash (1990), they administered a battery of measures to 188 college students. This battery of measures was extensive and consisted of the Panic Attack Questionnaire (PAQ), Anxiety Sensitivity Index (ASI), Coping Strategies Inventory (CSI), and many others. The CSI is a 72-item measure, and the subject is asked to write a brief account of a stressful occurrence in their life. Using this occurrence, the subject answers the 72 items on a 5-point Likert scale. This measure looks at eight coping strategies. The last question is a "stressor severity item," which asks the subject to rate

how stressful the occurrence was to them. Brown and Cash found that subjects who reported experiencing panic attacks (panickers) "provided significantly higher stress ratings" than those who did not report experiencing any panic attacks (nonpanickers) (1990, p. 23).

According to a study by Cox, Endler, and Norton (1994), students with nonclinical panic and no panic were assessed at a university. They were divided into 35 frequent panickers, defined as those who reported a panic attack in the past 3 weeks and several over the past year, 50 infrequent panickers, who reported no panic attacks in the past 3 weeks, but one or more over the past year, and 267 non panickers. They found that about 33% of both the infrequent and frequent panicking groups experienced uncued panic attacks, meaning that either group is susceptible to uncued panic attacks. They also found that for both groups the most endorsed situational context was "when under a great deal of stress" (Cox et al., 1994, p. 38). This information may imply that students who are experiencing the uncued panic attacks are not attributing their attacks to stress-related events or that those who are relating their panic attacks are doing so to make sense of their attacks (Cox et al., 1994).

Schmidt, Lerew, and Joiner Jr. (2000) gathered 1139 cadets from the United States Air Force Academy to participate in a study looking at the relationship among anxiety sensitivity, stress, and panic. The cadets were assessed during basic training. This program consists of several psychological and physical stressors, making it an ideal program to study the effects of high stress levels. The measures consisted of the ASI, the Beck Depression and Anxiety Inventories (to assess stress), and the Panic History Form. The latter form consists of 4 items and is a reliable measure of uncued panic attacks.

They found that general stressors (measured by depression and anxiety) negatively affected anxiety sensitivity. As the previous section has shown, anxiety sensitivity has a strong positive relationship with panic attacks. If high general stressors increase anxiety sensitivity and high anxiety sensitivity is associated with a greater number of uncued panic attacks, then it would stand to reason that high general stressors create a greater number of uncued panic attacks.

Although it is still unclear how exactly stress and uncued panic attacks are related, it appears there is a connection. The goal of this study is to show that there is a possibility of an underlying cause to uncued panic attacks. Although subjects state that uncued panic attacks are "out of the blue," it would seem that there is an underlying high level of stress that predisposes students to experience uncued panic attacks.

Social Support

In addition to anxiety sensitivity and its relationship to uncued panic attacks, and perceived stress and its relationship to uncued panic attacks, social support has also been examined. In a study by Norton, Zvolensky, Bonn-Miller, Cox, and Norton (2008), undergraduate students (489) from the University of Houston completed a battery of tests including: Panic Attack Questionnaire-IV, Mood and Anxiety Symptom Questionnaire, Panic Disorder Severity Scale, Beck Anxiety Inventory, Anxiety Sensitivity Index, and Bodily Sensations Questionnaire. The most frequently endorsed coping strategy of both "Panickers" (those that experienced enough symptoms to qualify for a DSM-IV panic attack) and "Limited Symptom Panickers" (those that experienced fewer symptoms than would qualify for a DSM-IV panic attack) was "talking or being with a friend or relative (58.3%)" (Norton et al., 2008, p. 1165) This strategy was also found to be the most

effective. It would seem that if social support was an effective coping strategy, then a participant who uses their social supports would be less likely to experience panic attacks.

In a study by Macaulay and Kleinknecht (1989), 660 high school and college students (age range: 13 to 18) were asked to complete surveys. The participants were asked to complete the Panic Attack Questionnaire and also asked questions assessing their stress and social support levels. Students were given the question: "When you are upset or under stress, how much support do you receive from: family? close friends?" (p. 224). They were to answer on a Likert scale (1=none to 4=a great deal). Results indicated that those who experienced no or mild panic reported more support from family than those who experienced moderate or severe panic. Participants reported high scores for close friend support; and there was no significant difference among groups.

According to a study by Viana and Rabian (2008), 94 introductory psychology students from a large state university were asked to complete a battery of questionnaires. Among these questionnaires were the Anxiety Sensitivity Index and the Inventory of Parent and Peer Attachment. This second measure consists of 75 self-report items that examine extent and quality of trust, communication, anger, and alienation. Students are asked to respond using a Likert scale (1 to 5). In an earlier section of this article, it is shown there is a consensus that anxiety sensitivity is a strong predictor of panic. Viana and Rabian looked at the relation between anxiety sensitivity and parent and peer attachment. They found that the more sensitive a participant was to anxiety the more alienation they reported experiencing from their mother, father, and/or peers. One might

make the connection that the more alienated a person reports feeling from their mother, father, and/or peer, the more panic they experience.

In a 2009 study by Batinić, Trajković, Duisin, and Nikolić-Balkoski, patients suffering from panic disorders and a control group were assessed using the following measures: Stressful Life Events Scale, Social Support Index (SSI), Family Hardiness Index (FHI), Family Coping Coherence Index (FCCI), and Relative and Friend Support (RFS). Each of the above is a self-report measure. The SSI assesses the degree to which the participant is integrated into the community in a beneficial way. The FHI assesses the resilience of the participant's family unit to outside stressors. The FCCI assesses the extent to which the participant's family works together harmoniously. Lastly, the RFS assesses the extent to which the participant uses relatives and friends as supports. Results indicated that the participants who had panic disorder reported significantly less community integration, outside stressor resilience, and harmonious family interaction then the control group. However, there were no significant differences between groups on family and friend support.

It is clear that there is a connection between panic and social support. Some of the studies found a distinction between friend support and family support and others did not. Macaulay and Kleinknecht (1989) found that family support was more beneficial than friend support. Viana and Rabian (2008) combined the two in a "social support" variable and found the combination significant. Batinić et al. (2009) found that family interaction is important, but not necessarily family and friend support. Since they lumped together family and friend support, it is unclear if just family support or just friend support has a significant impact on panic. The current study examined if social support was predictive

of panic, specifically uncued panic. As with stress, the connection between uncued panic and social support is uncertain. Additionally, the differences between friend and family support were explored; specifically that family support will be more predictive of uncued panic attacks than friend support. Family support was chosen as the better predictor because of the evidence presented above

Rationale & Hypothesis

From the extensive studies conducted, anxiety sensitivity has been consistently found to be a predictor of panic, specifically uncued panic. Stress has also been shown to be a strong predictor of panic attacks as evidenced above, but there is not as much evidence that supports it predictiveness of uncued panic attacks. Lastly, social support has been shown in some studies to aid in the prediction of panic attacks; however, it lacks evidence of its predictive value in relation to uncued panic attacks. Macaulay and Kleinknecht (1989) reported that stress from family and school and support from family were three of the five significant predictors of panic in a group of high school and college students. However, as stated previously, the uncued panic/stress and uncued panic/social support relationships have not been studied as extensively.

The current study is unique to other similar studies because it focuses on uncued panic attacks. Most other studies have examined cued panic attacks or, more often, explore panic attacks as a whole without differentiating between the two types. As stated before, cued and uncued panic attacks are fundamentally different; therefore, they should be studied separately. The current study is also using the Swede and Jaffe rationale of uncued panic attacks that is unique to any study found by this examiner. Lastly, the current study is examining social support as a predictor of uncued panic attacks, which is

not extensively studied. Most studies on social support and panic do not differentiate between cued and uncued panic attacks. Taking into consideration all of the evidence and rationale, it was hypothesized that:

1. Anxiety sensitivity would be a significant predictor of uncued panic frequency such that greater sensitivity would be predictive of increased uncued panic frequency.
2. Perceived stress would be a significant predictor of uncued panic frequency such that higher levels of perceived stress would lead to increased uncued panic frequency.
3. Social support would be a significant predictor of uncued panic frequency such that greater social support would lead to decreased uncued panic frequency. Family support was hypothesized to be a stronger predictor of uncued panic frequency than friend support.
4. Anxiety sensitivity was expected to be the strongest predictor of uncued panic frequency. Perceived stress was expected to add a unique contribution to uncued panic frequency above and beyond anxiety sensitivity. Lastly, social support was predicted to add an unique contribution to uncued panic frequency above and beyond the other two factors

Method

Participants

The participants for this study were recruited from introductory psychology courses at Eastern Illinois University. They were able to voluntarily sign up to take the study and received course credit for participating. There were no exclusionary criteria for

who could participate in the study. There were 127 students who took the survey. A cutoff was established for the minimum duration to complete the test (5 minutes). Participants who took less than 5 minutes to complete the survey were thought to have not taken the time to fully understand the items before responding. Ten participants were excluded from the study due to this criterion. After taking out these 10 students, the mean time for the remaining 117 participants was 10.3 (SD = 6.3) minutes.

In this sample there were 49 males (42.2%) and 65 females (56.0%); two participants did not provide gender data. The participants ranged in age from 18 to 38 with a mean age of 19.8 (SD = 2.5). Participants also reported their year in school, 50% of which were freshmen (n=58). There were 34 sophomores (29.3%), 18 juniors (15.5%), and 6 seniors (5.2%). In this sample, 84 reported being Caucasian (72.4%), 23 African-American (19.8%), 4 Hispanic (3.4%), 3 Multi-ethnic (2.6%), 1 Native American (0.9%), and 1 reported being "Other" (0.9%).

The participants were asked about their current and recent past counseling and their current medication for anxiety or depression. Six of the participants (5.2%) reported currently attending counseling. When asked if they had attended counseling in the past year, 21 participants (18.1%) responded in the affirmative. Lastly, 9 participants (7.8%) reported currently taking medication for anxiety or depression.

Materials

The measures that were used for this study are as follows: Anxiety Sensitivity Index (ASI), Perceived Stress Scale (PSS), and the Child and Adolescent Social Support Scale for college students (College CASSS). The participants were also asked to provide demographic information, answers questions about their current or past counseling and

medication usage, and a question that assesses the frequency of uncued panic attacks ("How many 'out of the blue' panic attacks have you experienced in the past year?"). This question was asked after the participant read a brief definition and a 13-item list of potential sensations. The definition and 13-item list were taken from the DSM-IV-TR (2000) and the question was created for the current study.

Anxiety Sensitivity Index (ASI; Reiss, Peterson, Gursky, & McNally, 1986). The ASI is a 16-item self-report measure. This index asks participants to rate how often they think or act a certain way when coping with anxiety symptoms. This scale measures the degree of fear a participant has of symptoms that are commonly associated with anxiety. For example, "When I notice my heart beating rapidly, I worry that I might be having a heart attack." It uses a 5-point Likert scale (0=very little to 4=very much). The ASI is scored by summing the scores of each item. Reiss et al. found an overall mean of 19 in their normative sample. A higher score would indicate more sensitivity to anxiety and a lower score would indicate less sensitivity to anxiety. This measure is widely used and was incorporated in many of the studies mentioned above. The ASI has been shown to have good validity, stability, and consistency (Brown & Cash, 1990; Reiss et al., 1986). In the current study, the ASI had high internal consistency ($\alpha = .93$).

Perceived Stress Scale (PSS; Cohen, 1983). The PSS is a 14-item self-report measure. The version being used for this study is the abbreviated 10-item scale. In 1988 Cohen and Williamson conducted a study where the items of the original PSS were loaded onto different factors. The 4 items with the lowest factor loadings were dropped (Cohen & Williamson, 1988), resulting in 10 core items. This scale measures the participant's perceived stress level. It looks at how overwhelming the participant finds

his/her life. The PSS is designed to be used with the general population who have a junior high school education or above. The questions are general in their nature; and, therefore, are free from a bias against subcultures (Cohen, 1994). The participants are asked to focus on the past 30 days when responding to the questions. It uses a 5-point (0 to 4) Likert scale asking the participants "how often have you felt..." For example, "In the last month, how often have you felt nervous and 'stressed'?" The PSS is scored by reversing the value of the positively stated items and then summing all the items. A higher score would indicate more perceived stress and a lower score would indicate less perceived stress. Cohen (1994) found that the mean score for ages 18 to 29 was 14.2. According to Cohen, the PSS is the most commonly used scale for measuring perceived stress (1994). It has been associated with many areas that are known to be linked with stress (i.e., contracting more colds; Cohen, 1994). The PSS 14-item was found to have adequate reliability (Cohen, Kamarack, & Mermelstein, 1983). The PSS 10-item was found to have similar reliability and slightly better validity than the previous 14-item PSS (Cohen and Williamson, 1988). In the current study, the PSS had a high internal consistency (α = .83).

Child and Adolescent Social Support Scale-College Version (CASSS; Malecki & Demaray, 2000). The College CASSS is a 60-item self-report measure assessing the participant's level of social support. The scale looks at four sources of support: family, other adults, close friends, and peers. The measure gives examples for three of the sources. It states that other adults constitute "professors, teacher assistants, academic advisors, residential advisors, employers, coaches, priests/ministers, etc." The scale states that significant others are included in the "close friends" category. Lastly, the

peer support includes "classmates, roommates, housemates, co-employees, team members, club members, and fraternity/sorority brothers or sisters." The College CASSS asks participants to rate how often each support source provides a certain type of support and how important certain support is. The ratings of support importance are typically used in clinical settings (Malecki, Demaray, & Elliott, 2004). For this study, only participants' ratings of support frequency will be used. This scale uses a 6-point Likert scale (1 to 6). An example statement is "...gives good advice." This statement is in each of the four subscales. For example, my family...gives good advice or my close friends...give good advice. The College CASSS can be scored as a whole or the subscales can be scored separately. For this study, the measure will be scored as a whole and also the family and "close friends" subscales will be scored separately. Scores are obtained by summing across items. A higher score would indicate more support frequency and a lower score would indicate less support frequency. The CASSS has been shown to have good reliability and validity in both middle school and high school populations (Malecki et al., 2004). Psychometric data is not yet available for the College CASSS. The current study found that the College CASSS had a high internal consistency ($\alpha = .97$). The College CASSS family and close friend scales were also looked at independently. The family scale had a high internal consistency ($\alpha = .97$). Likewise, the close friend scale had a high internal consistency ($\alpha = .98$).

Procedure

The above measures were administered to introductory psychology students online. The measures were entered into SONA and made available to students. They could access the survey at any time, but once the participants began the survey they must

have either finished in one sitting or withdrawn. The participants first answered the demographic questions, counseling and medicine usage questions, and frequency of uncued panic attacks question. They then completed the ASI, followed by the PSS, and finished with the College CASSS. Due to the nature of the SONA online system, the items were unable to be counter balanced. In order for a participant's survey to be used in the study, they must have answered the uncued panic frequency question.

Results

Anxiety sensitivity, perceived stress, and social support were measured using the ASI, PSS, and College CASSS, respectively. Furthermore, family and close friend support were examined using the College CASSS family and close friend subscales. The mean for the ASI found in this study was 23.51 (SD = 13.62). This mean can be compared to Reiss et al.'s study (1986) conducted to test the ASI using college students (M = 17.9), no standard deviation was reported. The mean for the PSS found in this study was 19.87 (SD = 7.03). This mean can be compared to Cohen et al.'s study (1983) where they looked at two different samples of college students (Sample 1: M = 23.18; SD = 7.55 & Sample 2: M = 23.67; SD = 6.20). The means (and standard deviations) for the College CASSS total, family subscale, and friends subscale are 270.31 (57.32), 64.72 (17.75), and 84.74 (18.92). There was no normative data available to compare means. Means and standard deviations for all study variables can be found in Table 1.

Out of the 117 participants, 95% reported experiencing at least one uncued panic attack in the past year (M = 2.13; SD = 1.51). Six participants (5%) reported experiencing no uncued panic attacks. There was no option for the participants to select "none" or "zero" for uncued panic frequency. The six participants mentioned above selected "no

response." The majority (42%) reported experiencing one uncued panic attack in the past year; 17% reported 2 uncued panic attacks; 16% reported 3 uncued panic attacks; 8% reported 4 uncued panic attacks; and 12% reported 5 or more uncued panic attacks.

Correlations among variables were explored in this study. The ASI and PSS were found to be significantly positively correlated with uncued panic frequency ($r = .46$; $r = .43$). Additionally, the PSS was found to be significantly positively correlated with the ASI ($r = .46$) and significantly negatively correlated with the College CASSS ($r = -.42$). All correlations among variables can be found in Table 2.

Hypothesis 1

A linear regression was conducted to examine the predictive value of anxiety sensitivity on uncued panic attacks. At an alpha level of .05, the relationship between anxiety sensitivity and uncued panic attacks was found to be statistically significant, $R^2 = .19$, $F(1, 113) = 26.75$, $p < .001$ (see Table 3).

Hypothesis 1 was confirmed as it was found that anxiety sensitivity was predictive of uncued panic attacks. The more anxiety sensitivity a participant reported, the greater the number of uncued panic attacks they also reported experiencing.

Hypothesis 2

A linear regression was conducted to examine the predictive value of perceived stress on uncued panic attacks. At an alpha level of .05, the relationship between perceived stress and uncued panic attacks was found to be statistically significant, $R^2 = .17$, $F(1, 111) = 23.09$, $p < .001$ (see Table 3).

Hypothesis 2 was confirmed. Perceived stress was predictive of uncued panic attacks. The more perceived stress a participant reported, the more uncued panic attacks they noted experiencing.

Hypothesis 3

A linear regression was conducted to examine the predictive value of overall social support on uncued panic attacks. At an alpha level of .05, the relationship between social support and uncued panic attacks was found to be statistically significant, $R^2 = .04$, $F(1, 104) = 4.60$, $p = .034$ (see Table 3).

The first half of hypothesis 3 was confirmed. Overall social support was predictive of uncued panic attacks. The more social support a participant reported, the lower the frequency of uncued panic attacks.

The second half of hypothesis 3 evaluated the predictive value of family support and close friend support. A linear regression was conducted to examine the predictive value of family support on uncued panic attacks. At an alpha level of .05, the relationship between family support and uncued panic attacks was not found to be statistically significant, $R^2 = .03$, $F(1, 109) = 2.90$, $p = .091$ (see Table 3). Another linear regression was conducted to examine the predictive value of close friend support on uncued panic attacks. At an alpha level of .05, the relationship between close friend support and uncued panic attacks was found to be statistically significant, $R^2 = .06$, $F(1, 111) = 6.43$, $p = .013$ (Table 3).

The latter half of the third hypothesis was not supported. This study found that close friend support was more predictive of uncued panic attacks than family support, whereas the reverse was anticipated.

Hypothesis 4

A hierarchical multiple regression analysis was conducted to predict uncued panic attack frequency. There were three steps total. In the first step, anxiety sensitivity was used as the predictor. At an alpha level of .05, the relationship between anxiety sensitivity and uncued panic attack frequency was found to be statistically significant, $R^2 = .23$, $F(1, 100) = 29.20$, $p < .001$. Participants who reported more anxiety sensitivity also experienced more uncued panic attacks. This accounted for 23% of the variance in uncued panic attacks.

In the second step, perceived stress was added to determine if it would account for a significant and unique amount of variance in uncued panic attack frequency over and above anxiety sensitivity. The results indicated that perceived stress did provide added predictive value, R^2 change = .06, $F(2, 99) = 19.58$, $p = .006$. High levels of perceived stress were strongly related to experiencing uncued panic attacks. It accounted for 6% of the variance in uncued panic attacks,.

In the third step, social support was added to determine if it accounted for unique variance in uncued panic attack frequency above and beyond anxiety sensitivity and perceived stress. The results indicated that social support did not provide added predictive value, $R^2 = .001$, $F(3, 98) = 13.01$, $p = .664$. Regression results for Hypothesis 4 are shown in Table 4.

Hypothesis 4 was partially validated. Anxiety sensitivity was the most predictive and perceived stress did add a unique predictive contribution, but social support was not found to have added any predictive value.

Discussion

This study sought to examine if anxiety sensitivity, perceived stress, and social support were predictive of uncued panic in a sample of college students. It was also hypothesized that family support would be more predictive of uncued panic than close friend support. Furthermore, this study strived to discover if the hierarchical model (anxiety sensitivity, then perceived stress, then social support) was predictive of uncued panic attacks. Results showed that all three factors were significant predictors of uncued panic; and the hierarchical model was found to be partially predictive of uncued panic. Anxiety sensitivity was found to be predictive and perceived stress was found to have a unique contribution, but social support did not add any predictive value. However, this study found close friend support to be more predictive of uncued panic than family support. Furthermore, family support was not found to be a significant predictor.

Swede and Jaffe postulated that uncued panic could be explained by three steps: 1) a person experiences stress over a long period of time, 2) that person is putting out more energy than they are gaining (i.e., experiencing stress while not taking care of him/herself mentally, emotionally, and/or physically), and 3) the person has a predisposition to anxiety sensitivity. The hierarchical model provides support for this explanation. As stated before, a predisposition to anxiety sensitivity and the person's perceived experience of stress over time was found to be significant and therefore consistent with Swede and Jaffe's model. However, social support was not found to add a contribution, but was a significant predictor of uncued panic when examined separately.

To explain this finding further the correlations among variables can be examined. Social support (the College CASSS) was significantly correlated with perceived stress

(the PSS). This high correlation could be the contributing factor to social support not adding predictive value. Additionally, perceived stress was significantly correlated with anxiety sensitivity (the ASI). Although perceived stress did add predictive value, this finding should be examined more closely. It may be that this finding is not significant because of the multicollinearity among variables.

Discrepancies in Findings

In this study there were three large discrepancies that should be discussed. Firstly, in the hierarchical model social support did not add predictive value. This finding was contrary to what was hypothesized. Secondly, close friend support was found to be more predictive than family support. The reverse was hypothesized. Lastly, the current study found a much larger percentage of participants that reported experiencing uncued panic attacks than the body of research on uncued panic attacks.

Social support was chosen to represent one of the ways a person could input more energy, and, therefore, counterbalance some of the energy being taken away due to stress. However, social support is not the only way in which a person could input energy. Diet, exercise, hobbies, meditation, etc. could all be examined in the same way social support was in this study. One of these other coping strategies may not be as closely linked to anxiety sensitivity or perceived stress; therefore, it may add a unique predictive value. However, it may be that coping strategies in general are too closely linked to one of the other two predictors and may not add a unique contribution. It would be worth studying to make this discovery.

Close friend support was found to be more predictive of uncued panic than family support, contrary to what was hypothesized. Macaulay and Kleinknecht (1989) found

family support to be significant, but close friend support was consistently high and did not differ among panic groups. There could be a number of explanations for the inconsistency in findings between previous studies and the current study. Firstly, Macaulay and Kleinknecht's sample consisted of high school students and college freshmen. Since most of the participants were younger and living with their families, they could have had more opportunities for their families to give them support. In contrast, the current study's sample was solely college students, including some upperclassmen. This population may not be in contact with their parents as much as the high school student and college freshmen; therefore, they would not have as much parent support frequency due solely to contact limitations. Secondly, the two samples may have differed due to age. The current study's population was older than Macaulay and Kleinknecht's sample. Older students may be moving away from family support and seeking more support from peers. This population may want more independence and could see coming to their parents for support as a lack of independence.

The percentage of participants who reported experiencing at least one uncued panic attack in the last year was vastly larger (95%) than previous research has found. Craske et al. found only a 14% lifetime prevalence rate of uncued panic attacks in a sample of 317 college students (1995). Both this current study's and Craske et al.'s study took participants from an introductory psychology student pool. Other studies found results more consistent with Craske et al.'s findings (Deacon & Valentier, 2001; Telch et al., 1989; Whittal et al., 1994). There could be a couple of reasons for this large discrepancy. A possible explanation could be that the time that the data was collected was near the end of the semester and finals. Many students could have been feeling more

stress; therefore, the participants may have been experiencing more uncued panic. Another possible explanation could be the name of the current study. The study was posted online under "PANIC!" This name could have drawn participants who experience panic. Additionally, there was no "zero" or "none" option to select when the participants reported their panic frequency; and they may not have understood the phrase "out of the blue" when asked this same question. Lastly, the sample collected was small and may not be an accurate representation of the college population.

Limitations and Implications

The current study, as with all studies, has limitations. As mentioned above, the sample size was small and may not have been an accurate representation of the population. Additionally, the study was conducted online using the SONA system. SONA does not allow measures to be counterbalanced. Without this counterbalance, the results may have been due to the order the measures were presented. Furthermore, there could be no observational component due to the study being conducted online and it becomes easier for participants to answer items without fully understanding the content. As stated previously, this study was conducted at the end of the semester. This timing may have encouraged participants to hastily complete the survey. Lastly, only one item assessed for uncued panic frequency. This item was created for this study and did not have a 'zero' or 'none' option. To make this item more valid and reliable, a 'zero' option needs to be added and more studies need to be conducted to evaluate its psychometric properties. Additionally, the participants that were reported as experiencing no uncued panic attacks responded to the uncued panic frequency question with 'no response.' These participants

may have chosen this option because there was no 'zero' or 'none' option or because they did not wish to respond to the question.

Results from the current study have multiple implications for the treatment of uncued panic. Anxiety sensitivity, perceived stress, and social support were all found to be predictive of uncued panic frequency. Therefore, clinicians can take care to assess for and be aware of these factors when working with clients who experience uncued panic attacks. Based on results of the current study and many previous studies, clinicians can be confident asking about symptoms of anxiety sensitivity during assessment and to help manage these symptoms in clients who report uncued panic attacks. Clinicians can also take note that reducing stress levels may help decrease uncued panic attacks in college-aged clients. Lastly, clinicians may want to include work with clients to increase their overall social support during treatment, which may help the client to be less likely to experience uncued panic attacks.

Even though social support did not add a unique contribution above and beyond anxiety sensitivity and stress, it was found to be significant predictor of panic on its own. It may be best to address anxiety sensitivity and stress in treatment for panic before social support, but encouraging increased social support may still be beneficial in decreasing uncued panic attacks in some. Based on the results of the current study, clinicians may want to pay close attention to friend support when working with this population, as it may be more beneficial in reducing panic than parent support. However, increased overall social support will likely be beneficial for most college students currently experiencing uncued panic.

Future Research and Conclusion

Several areas would be beneficial for further study. The current study did not find social support to add a unique contribution to the hierarchical model to predict uncued panic above and beyond anxiety sensitivity and perceived stress. However, social support is just one type of coping strategy that could be tested within this theoretical model. Diet, exercise, mediation, hobbies, etc. could all be tested in the current hierarchical model in place of social support. Before running model tests with alternate coping strategies, it would be helpful to test for multicollinearity between social support and stress, and social support and anxiety sensitivity. Furthermore, multicollinearity should be explored between anxiety sensitivity, perceived stress and any of the other coping strategies before they are added into the model. Additionally, the current study explored uncued panic attacks in college students, but more research needs to be conducted to examine uncued panic attacks in the general population. Lastly, the current study used a one-item measure written by the author for uncued panic frequency. Future studies could either continue to examine this one-item measure for psychometric properties or create a new measure that assesses specifically for uncued panic.

In conclusion, the current study showed anxiety sensitivity to be a significant predictor of uncued panic frequency in college students with perceived stress adding a unique contribution. Social support was significant on its own, but did not add any predictive value above and beyond the other two predictors. When examined separately, family support was not found to be a significant predictor of panic, but close friend support was significant. Clinicians may use the results from the current study to further their understanding of uncued panic attack predictors. This new information may then

help to inform treatment of clients with uncued panic to ensure use of effective interventions to reduce anxiety sensitivity and stress while increasing social support, especially close friend support. Uncued panic seems to be relatively common in college students and can lead to the development of Panic Disorder (Tull et al., 2006), depression (Tull et al., 2006; Whittal et al., 1994), and substance abuse (Craske et al., 1995). The results of the current study can help prevent these disorders and help college students focus on the college experience.

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Table 1. Means and standard deviations of measures

Measure	*M*	*SD*
Panic Frequency	2.13	1.51
ASI	23.51	13.62
PSS	19.87	7.03
C-CASSS total	270.31	57.32
C-CASSS family	64.72	17.75
C-CASSS friends	84.74	18.92

Note. Panic Frequency: Uncued Panic Frequency; ASI: Anxiety Sensitivity Index; PSS: Perceived Stress Scale; C-CASSS total: Children and Adolescent Social Support Scale-College Version total score; C-CASS family: family subscale; C-CASSS friends: close friend subscale.

Table 2. Correlations between all study variables

Measure	1	2	3	4
1. Panic Frequency	---	.48*	.43*	-.20
2. ASI	.48*	---	.46*	-.14
3. PSS	.43*	.46*	---	-.42*
4. C-CASSS	-.20	-.14	-.42*	---

* $p < .001$

Table 3. Regression results in predicting uncued panic frequency

Model	R^2	β	t	p
Hypothesis 1				
Anxiety Sensitivity	.19	.44	5.17	<.001
Hypothesis 2				
Perceived Stress	.17	.42	4.81	<.001
Hypothesis 3				
Social Support Total	.04	-.21	-2.14	.03
Close Friends	.06	-.23	-2.54	.01
Family	.03	-.16	-1.70	.09

Table 4. Hierarchical regression to predict uncued panic frequency

Model	ΔR^2	*Total* R^2	β	*t*	*p*
Step 1	.23	.23			
Anxiety Sensitivity			.46	5.40	<.001
Step 2	.06	.28			
Perceived Stress			.27	2.82	.006
Step 3	.001	.29			
Social Support			-.04	-.44	.66

Appendix A

Demographics

Please provide a response to the following items.

Age:_____

Gender:_____

Year in School: 1) Freshman 2) Sophomore 3) Junior 4) Senior 5) Graduate

Ethnicity: 1) White/Caucasian 2) Black/African-American 3) Hispanic/Latino(a)

4) Native America 5) Asian 6) Multi-ethnic 7) Other:_____

Relevant Information

Are you currently in counseling? 1) Yes 2) No 3) Do not wish to reply

Have you sought counseling in the past year? 1) Yes 2) No 3) Do not wish to reply

Are you currently taking any medications for anxiety or depression? 1) Yes 2) No 3) Do not wish to reply

Uncued Panic Frequency

A panic attack means a sudden ("out of the blue") increase in anxiety during which 4 or more of the following sensations are experienced:

1. Feeling short of breath
2. Choking
3. Sweating
4. Feeling unreal or detached from yourself
5. Hot or cold flushes
6. Numbness or tingling feelings (pins and needles)
7. Palpitations or heat racing
8. Feeling of pain or discomfort in chest
9. Dizziness, feeling unsteady, or fainting
10. Nausea or discomfort in the stomach
11. Trembling or shaking
12. Fear of dying
13. Fear of going crazy

How many "out of the blue" panic attacks have you experienced in the past year?

1 2 3 4 5 or more

Appendix B

Anxiety Sensitivity Index

Instructions: Please rate each item by selecting one of the five answers for each question.

Please answer each statement by writing the number in the blank that best applies to you.

0	1	2	3	4
very little	a little	some	much	very much

___ 1. It is important not to appear nervous.

___ 2. When I cannot keep my mind on a task, I worry that I might be going crazy.

___ 3. It scares me when I feel shaky.

___ 4. It scares me when I feel faint.

___ 5. It is important to me to stay in control of my emotions.

___ 6. It scares me when my heart beats rapidly.

___ 7. It embarrasses me when my stomach growls.

___ 8. It scares me when I am nauseous (sick stomach).

___ 9. When I notice my heart beating rapidly, I worry that I might be having a heart attack.

___ 10. It scares me when I become short of breath.

___ 11. When my stomach is upset, I worry that I might be seriously ill.

___ 12. It scares me when I am unable to keep my mind on a task.

___ 13. Other people notice when I feel shaky.

___ 14. Unusual body sensations scare me.

___ 15. When I am nervous, I worry that I might be mentally ill.

___ 16. It scares me when I am nervous.

Appendix C

Perceived Stress Scale

Instructions: The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by writing in the blank how often you felt or thought a certain way.

0	1	2	3	4
never	almost never	sometimes	fairly often	very often

___ 1. In the last month, how often have you been upset because of something that happened unexpectedly?

___ 2. In the last month, how often have you felt that you were unable to control the important things in your life?

___ 3. In the last month, how often have you felt nervous and "stressed"?

___ 4. In the last month, how often have you felt confident about your ability to handle your personal problems?

___ 5. In the last month, how often have you felt that things were going your way?

___ 6. In the last month, how often have you found that you could not cope with all the things that you had to do?

___ 7. In the last month, how often have you been able to control irritations in your life?

___ 8. In the last month, how often have you felt that you were on top of things?

___ 9. In the last month, how often have you been angered because of things that were outside of your control?

___ 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Appendix D

Child and Adolescent Social Support Scale (College Version)

Instructions: You will be asked to respond to sentences about some form of support or help that you might get from either you family, other adults, close friends, or peers. Read each sentences carefully and respond to them honestly. There are no right or wrong answers. For each sentence you are asked to rate how often you receive the support described. Respond by writing your rating in the blank provided.

1	2	3	4	5	6
never	almost never	sometimes	most times	almost always	always

MY FAMILY…

___ 1. is sensitive to my needs.

___ 2. understands me.

___ 3. listens to me when I need to talk.

___ 4. gives me information about things I don't know/don't know how to do.

___ 5. gives me good advice.

___ 6. takes time to teach me new things.

___ 7. lets me know when I do something well.

___ 8. gives me constructive criticism when I make mistakes.

___ 9. shows or tells me that they are proud of me.

___ 10. loans or gives me things that I need.

___ 11. takes time to help me make decisions.

___ 12. provides me with financial support.

___ 13. lets me know I am important to them.

___ 14. supports the decisions I make.

OTHER ADULTS IN MY LIFE…

(professors, teacher assistants, academic advisors, residential advisors, employers, coaches, priests/ministers, etc.)

___ 15. let me know that I am important to them

___ 16. treat me fairly.

___ 17. make it okay to ask questions.

___ 18. help me with things I am having difficulty with or don't understand.

___ 19. help me solve problems by giving me information.

___ 20. let me know when I do something well.

___ 21. give me constructive criticism when I make mistakes.

___ 22. listen to my ideas and opinions.

___ 23. spend extra time with me when I need it.

___ 24. are sensitive to my needs.

___ 25. listen to me when I have concerns.

___ 26. give me information about things I don't know/don't know how to do.

___ 27. give me good advice.

MY CLOSE FRIENDS…

(including significant others)

___ 28. understand my feelings.

___ 29. help me feel better when I am feeling down.

___ 30. listen to me with I need to talk.

___ 31. give me good advice.

___ 32. take time to explain things to me that I don't understand.

___ 33. nicely tell me the truth about how I do on things.

___ 34. give me constructive criticism when I make mistakes.

___ 35. take time to help me make decisions.

___ 36. defend me or stick up for me when others are treating me badly.

___ 37. share their things with me.

___ 38. loan me things that I need or want (clothes, CDs, car, money, etc.).

___ 39. take time to help me do things that I need to get done.

___ 40. keep private things about me confidential.

___ 41. are sensitive to my needs.

___ 42. distract me from my worries or stressors.

___ 43. show or tell me that they are proud of me.

___ 44. help me solve problems by giving me information.

___ 45. care about me.

MY PEERS…

(classmates, roommates, housemates, co-employees, team members, club members, fraternity/sorority brothers or sisters)

___ 46. treat me well.

___ 47. listen to my ideas and opinions.

___ 48. give me advice when I need it.

___ 49. help me when I need it.

___ 50. give me constructive criticism when I make mistakes.

___ 51. include me in activities.

___ 52. notice when I have worked hard.

___ 53. share my interests.

___ 54. share their things with me.

___ 55. teach me how to do things I don't know/don't know how to do.

___ 56. tell me I did a good job when I do something well.

___ 57. catch me up on things I have missed.

___ 58. are sensitive to my needs.

___ 59. listen to me when I need to talk.

___ 60. take time to help me with things I need to get done.